L2: Entry 2 of 13 File: USPT Jan 9, 2007

DOCUMENT-IDENTIFIER: US 7162473 B2
TITLE: Method and system for usage analyzer that determines user accessed sources, indexes data subsets, and associated metadata, processing implicit queries based on potential interest to users

PRIOR-PUBLICATION:

DOC-ID	DATE
US 20040267700 A1	December 30, 2004

Description Paragraph (32):
In addition to indexing the full content and metadata of items, custom metadata can be added to items (i.e., user tagging). Arbitrary tags can be added by a user to substantially any item. These custom tags are then treated as a metadata attribute and can be used in a similar manner as other metadata properties for searching and results organization. Currently, these tags are used to supplement existing organizational schemes (e.g., mail or file hierarchy), but can also provide a single organizational schema for content. It is also possible to add usage-based metadata (e.g., from the usage component) to the index. Usage-based metadata can include events such as the last time a user accessed, or printed or mailed the content to others, or the complete history of interaction. Richer notions of interaction with documents (or portions of documents) are also possible. Usage data can be used to improve the presentation of results or to modify matching algorithms.

L2: Entry 6 of 13 File: USPT May 16, 2006

DOCUMENT-IDENTIFIER: US 7047253 B1
** See image for Certificate of Correction **
TITLE: Mechanisms for storing content and properties of hierarchically organized resources

Description Paragraph (54):
Instead of, or in addition to, customizations performed by adding tags to the resource table XML schema, customization can also be performed through the use of an ANY column 502 of the resource table 402. The ANY column 502, which is illustrated in FIG. 5, corresponds to an <any> element contained in the resource table XML schema. However, unlike the other elements in the resource table XML schema, the <any> element does not correspond to any particular custom attribute of the user. Rather, the <any> element causes the database system to create the ANY column 502 whose purpose is to hold any custom metadata attributes that do not have their own column. According to one embodiment, the <any> element is defined with maxoccurs="unbounded", thereby indicating that the element can correspond to any number of such custom metadata attributes.

L9: Entry 1 of 9 File: USPT Aug 15, 2006

DOCUMENT-IDENTIFIER: US 7093191 B1
TITLE: Video cataloger system with synchronized encoders

Abstract Text (1):
One aspect of the invention is directed to a system and method for video cataloging. The video is cataloged according to predefined or user definable metadata. The metadata is used to index and then retrieve encoded video. In one embodiment, the video is cataloged concurrently with encoding of the video.

Description Paragraph (25):
FIG. 2 depicts an example user interface that is representative of the type of graphical user interface (GUI) than could be built around the Video Engine shown in FIG. 9. In FIG. 2, the Video Cataloger user interface is contained in a window 170. The main controls are exposed as menus and a tool bar 182. A panel 172 displays the live video being digitized, with play, stop, etc. controls that interact remotely with the analog source via a deck controller 240 (FIG. 3). Keyframes extracted during the capture process are displayed in a panel 176, while the corresponding close-caption text and timecodes are displayed in a panel 178. A panel 184 displays the user-defined clip annotations, created by marking in- and out-points. The columns 186 and 188 display the in- and out-time codes for the marked clip, respectively, while the remaining columns 190, 192, 194 are an example of a user defined schema of labels to describe the clip. Finally, at the bottom of the window 170 is a timeline 180 that depicts the total time of the capture session, with a highlighted section corresponding to the currently selected range of keyframes.

Description Paragraph (45):
The Clip Track 332 is somewhat unique in that the definition/creation of this metadata is performed by a user using the GUI to mark in- and out-times, and type in associated alphanumeric data. Each bar in the Clip Track consists of a user-defined group of metadata fields that are application specific. The bar length is timespan from intime to outtime. Clips may be overlapping. Typically, the clips all have the same schema. For instance, metadata may include: Story Title, Report, Location, Shot Date, Air Date, Keywords, Summary, and so on. Each bar shows a clip label. So for instance, the clip labeled "Logo" may make use of the Story Title data item. Lastly, a Custom Trk is shown to indicate that metadata is extensible. That is, unique metadata can be defined and added to the Video Cataloger 110 by a user. Custom metadata tracks could include information provided in collateral data to the video information. For instance, global positioning satellite (GPS) data specifying latitude and longitude of a video camera and telemetry data of a vehicle carrying a video camera are examples of such collateral data.

Description Paragraph (50):
TABLE-US-00001 TABLE 1 Track Data Types Metadata Data Track Type Notes Virtual Base Class untyped (void *) Defines In-time and Out-time for all tracks Keyframe Track image (bitmap) In-time equals Out-time, i.e., keyframe is a point in time CC-text Track Text fragment Each text fragment is typically a sentence (but not required to be so) and spans a time interval Audio Class Track Enumerated Speech, Silence, Music, Classes Applause, Siren, etc . . . , each spanning a time interval when that classification was valid Speech Track Text fragment Each text fragment spans a time interval Keyword Track Word (text) keyword utterance spans a short (1/2 sec) time

interval Speaker ID Track Enumerated Identifiers of individuals whose Classes speech is recognized . . . each Speaker ID spans a time interval when that speaker was speaking Clip Track Label Set (user Different Label Set schemas can defined set of be used in different applications. labels): Text, Each Label Set is applied to all Enums, Dates, clips within a Cataloging Numbers, etc. session. The Clip definition spans a time interval marked by the user. Each Label field value is entered manually by the user. Custom Data type defined Typically, a custom metadata by plug-in generator uses a custom track data type for storing its meta- data. It could also re-use existing track data types such as Text Fragment.

Description Paragraph (56):
The core aspects of extensibility are: Extensible Track data types are registered with the Metadata Track Index Manager 530. Any desired data representation can be defined and installed, such as region markers, OCR text and confidence values, face identifiers, camera parameters (pan, tilt, zoom), etc. Any property that a feature extractor chooses to extract can be placed in a custom metadata track. Extensible Feature Extractors can be registered with the Feature Extractor Framework 510 to operate on digital media, or on any collateral data they may choose to collect when called. Extensible Event triggers: event criteria (e.g., cc-text="clinton", or audio_class="tone") can be registered in the Event Dictionary 542, and arbitrary actions can be registered and triggered (e.g., grab a keyframe right then, or stop capture). The Event Monitor 540 monitors the incoming metadata to decide if an event is triggered. If so, it sends a message to the Event Dispatcher 544 which invokes the corresponding action 546 for the event.

Description Paragraph (88):
The output process 890 starts at a begin step 892 and proceeds to step 894 to process the session level metadata. This metadata is not time-based, but rather is descriptive of the entire logging session. The session level metadata corresponds to the information 404 generated by the Metadata Track Index Manager 402 shown in FIG. 7. The nature of the session level metadata is a schema which may be defined by the user, in addition to standard items such as the location where the video is taken. This information is encapsulated in an HTML frame 896 used to view this data on request, and is linked to the main HTML frame 916.

Other Reference Publication (14):
Visionary, Media Access Technologies, Ltd., (1998) (Brochure), "Automated Logging and Search Solution for Multimedia Streams and Libraries". cited by other

Other Reference Publication (21):
Islip Media, MediaKey Digital Video Library System Demonstration, NAB (1998) (Information Sheet). "Unlocking the Valve of Video". cited by othe- r

CLAIMS:

13. The method of claim 11, additionally comprising repeating the aforementioned acts a plurality of times thereby generating a digital video library.

14. The method of claim 13, additionally comprising browsing the digital video library using the digital metadata tracks as indices into the encoded digital video data.

Previous Doc Next Doc Go to Doc#

L9: Entry 2 of 9 File: USPT Jan 24, 2006

DOCUMENT-IDENTIFIER: US 6990636 B2
TITLE: Enterprise workflow screen based navigational process tool system and method

PRIOR-PUBLICATION:

DOC-ID	DATE
US 20030197733 A1	October 23, 2003

Brief Summary Text (29):
The predefined process may be defined as a series of steps to accomplish an objective. Process data representing the series of steps may be stored in the process database. Defining a process may include indicating one or more standard screens to be used for each of a series of steps. The standard screens may be selected from a limited number of standard screens. A purpose may also be specified for each of the screens. A business object may also be specified for each screen. The business object may specify data to be displayed by the screen. The business object may also provide an interface to a remote data store or application. The series of screens with specified purposes and business objects may be defined in metadata, which may be formatted in XML. Storing process data representing the series of steps may include transmitting the metadata to the server computer. The server computer may insert the metadata in the process database.

Description Paragraph (27):
The universal client included program instructions that may be stored on a computer-readable medium and when executed present a standard user interface within which predefined business processes may be executed. The universal client is configured to render one or more of the standard screens as defined by a process received from a server. In a preferred embodiment, the universal client may be implemented as a Java applet that is accessed through a standard Java-enabled internet browser, such as Netscape Navigator or Microsoft Internet Explorer. In other embodiments, the universal client may be a stand alone application or may run under a Java virtual machine and include its own communication interface. While the universal client is implemented in Java in a preferred embodiment, other embodiments may be implemented in other development languages. The universal client may also include dynamic linked libraries (DLLs) that provide the Object Linking and Embedding (OLE) interface to desktop applications such as Microsoft Office applications.

Description Paragraph (44):
Target Screen--A "target" screen may be one of the types of screens designated to implement a process. A "target" screen may provide the ability to maintain individual records in a database. Each field may be dynamically displayed based on its type within a back-end database. For example, if the field is defined as a character field, then a text control is placed on the screen to contain the value. The target screen may be used for performing database manipulation (usually an individual row in a table of a relational database). The target screen is flexible to allow all types of database manipulation. This includes the traditional structured query language (SQL) Insert, Update and Delete statements as well as application program interface (API) calls to satisfy non-relational database schemas, business objects and other external functions. The target screen may allow

users to maintain data from disparate systems all on the same screen. Purposes which may be set for the target screen include: 1) View, 2) Create, 3) Update, 4) Delete.

Description Paragraph (69):
The universal clients and process server provide a data-driven process framework that provides a structured method for integrating all of the applications and databases that a person would involve in a business process. All of the data that is required to define and execute a process within this framework may jointly be referred to as metadata. This powerful framework may allow businesses to control process functionality by simply distributing the data that defines the process over the network instead of the traditional, time- and labor-intensive method of distributing executables. All of the process data that is required to define and execute a process may be defined in metadata, as well as the process administration data, such as the user, role, and organizational data that is necessary for the management of workflow and access by users. All metadata may be stored in a metadata process database, which may be an OBDC-compliant relational database.

Description Paragraph (112):
Referring now to FIG. 16, the metadata-based processes may be revised to build other processes and may be modified. Furthermore, different layers of metadata rules may be employed to implement processes. Layered over process server 202 may be general operation rules 600 which represent process rules for a broad range of data processing activities generally applicable to businesses and enterprises. These process rules may be incorporated into standard sets of metadata that then may be used by a wide range of businesses. Standard sets of metadata for industry best practice business rules 602 may also be prepared for specific industries 1 to N. Finally, metadata for customer or user specific rules 604 may be prepared to sit on top of the industry specific rules. The three layers may be used together to solve a wide range of enterprises' data processing needs.

Previous Doc Next Doc Go to Doc#